

National Center for Biomedical Ontology Call for Driving Biological Projects

Proposals due: July 1, 2008

Awards made: September 15, 2008

Funding begins: January 1, 2009

The Nature of Driving Biological Projects

The National Centers for Biomedical Computing (NCBCs) comprise seven centers dedicated to the development of a national infrastructure for biomedical computation. Each NCBC supports a very small number of Driving Biological Projects (DBPs) that, while pursuing significant scientific research of their own, interact in an important way with their respective center to stimulate the development of new computational resources and technologies and to provide “applications pull” for the center’s technical work. DBPs are expected to be early adopters of each center’s technology, to help stimulate new creative ideas leading to novel computational solutions, and to collaborate broadly with the center’s activities. The key personnel of DBPs are expected to attend center project meetings, to participate in regular teleconferences, and to contribute to all aspects of the center. More information about DBPs in general is available in the NCBC program announcement (<http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-04-022.html>).

NCBO DBPs

The National Center for Biomedical Ontology (NCBO) is an international consortium of researchers committed to improving human health by developing computational methods and infrastructure that accelerate biomedical discovery. Our vision is that all biomedical knowledge and data are disseminated on the Internet using principled ontologies in such a way that the knowledge and data are accessible, semantically interoperable, and useful for furthering biomedical science and clinical care. Our mission is to create software and support services to use ontologies in biomedical science and clinical care, ranging from tools for application developers to software for end-users.

An NCBO DBPs must be an independent biomedical project with ongoing, peer-reviewed support from the National Institutes of Health or other appropriate sponsor. The funding provided by NCBO is intended primarily to sustain collaborative activities with the Center, not to support the ongoing biomedical research. The ideal NCBO DBP will be a self-contained biomedical research activity that will employ or contribute to biomedical ontologies, or will require the use of computer-based tools that make use of biomedical ontologies. The primary focus of the DBP should be biomedical investigation. It is anticipated that the DBP will serve as a test bed for the NCBO’s technology and will provide a showcase for how the NCBO’s technology can enable or accelerate world-class biomedical investigation.

The National Center for Biomedical Ontology (NCBO) anticipates supporting one or two new DBPs beginning January 1, 2009. The DBPs will be managed as a subcontract from Stanford University, the administrative home of the NCBO. Maximum award will be

\$250,000 annually for up to three years (total costs). The award is contingent on the ongoing support of the NCBO by the National Institutes of Health and is renewable annually based on satisfactory performance as measured by synergy with the NCBO and the degree to which the research conducted drives the NCBO towards accomplishment of its mission and deliverables.

Information of about the NCBO, its current DBPs, and its associated technologies is available from its Web site (<http://bioontology.org>).

Eligibility

- The principal investigator of the DBP must have ongoing, peer-reviewed research support from the National Institutes of Health.
- The proposed project must be aligned with the overreaching goals of NCBO.
- The proposed project must provide a driving motivational biomedical problem.

How to Submit a Proposal

Proposals for NCBO DBPs must include a research plan, a budget for the full project period, and a budget justification. Proposals should follow the conventions of the National Institutes of Health Form 398, which is used for research-grant applications. The research plan should be no more than 15 pages, and must include the following sections:

1. Specific Aims (The principle objective of the biomedical research; no more than one page)
2. Background and Significance (Why is the biomedical research question important?)
3. Prior Work (A succinct description of research results to date)
4. Research Methods (The proposed research activities that will take place during the period of NCBO support)
5. Proposed use of NCBO Technology (A summary of how existing and planned NCBO technology will contribute to the biomedical research plan)
6. Other collaborative considerations (Additional ways in which the DBP will contribute to the goals of the NCBO)

Applicants planning to submit a proposal to become an NCBO DBP should discuss their proposal with:

Daniel Rubin, M.D., M.S.
Director of Scientific Development
The National Center for Biomedical Ontology
rubin@med.stanford.edu

- No proposal will be accepted for review unless it has been first discussed with Dr. Rubin.
- No proposals will be accepted for review after July 1, 2008.

Criteria for Selection

- Scientific merit
- Relevance of the proposal to the aims of the NCBO
- Approach and Innovation
- PI and Environment
- Plans to obtain support for the DBP's research after July 31, 2010.

Review Procedure

Proposals for NCBO DBPs will be reviewed by a committee consisting of the NCBO Executive Committee, the chair of the NCBO Scientific Advisory Board, and the NIH Program Officer and Lead Science Officer. Notification will be made by September 15, 2008, with funding for 2 DBPs slated to begin on or after January 1, 2009.

Timeline

- July 1, 2008 – Final Proposals Due
- September 15, 2008 – Notification of Award
- January 1, 2009 – Earliest date for commencement of funding DBPs